

RODIONOV, Yevgeniy Pavlovich; PUSH, V.M., nauchnyy redaktor; KONTSEVAYA,  
E.M., redaktor; KUZ'MIN, D.G., tekhnicheskiy redaktor

[Lathes] Tokarnye stanki. Moskva, Vses. uchebno-pedagog. izd-vo  
Trudrezervisdat, 1956. 102 p. (MLRA 9:8)  
(Lathes)

PAVLOV, Lavrentiy Yerofeyevich; KARATYGIN, A.M., kandidat tekhnicheskikh nauk, nauchnyy redaktor; KONTSEVAYA, E.M., redaktor; KUZ'MIN, D.G., tekhnicheskiiy redaktor ~~XXXXXXXXXXXXXXXXXXXX~~

[Modern devices for inspecting cutting tools] Sovremennye pribory dlia kontrolya reshushchego instrumenta. Moskva, Vses. uchebno-pedagog. izd-vo Trudreservizdat, 1956. 77 p. (MLRA 10:2)  
(Cutting tools)

KONTSEVAYA, E.M.

Call Nr AF 1119832

BOOK

AUTHOR: Yelizavetin, Mikhail A.

TITLE: Surface Hardening of Machine Parts (Uprochneniye poverkhnosti detaley mashin)

PUB. DATA: Vsesoyuznoye uchebno-pedagogicheskoye izdatel'stvo trudrezervizdat, Moscow, 1956, 82 pp., 10,000 copies

ORIG. AGENCY: None given

EDITORS: Editor: Kontsevaya, E.M.; Technical Editor: Kuz'min, D.G.; Science Editor: Bolkhovitinova, Ye.N., Candidate of Technical Sciences

PURPOSE: This pamphlet is intended for coaches of industrial training courses, for teachers and graduates of vocational and technical schools and for skilled workers in machine shops.

Card 1/4

Call Nr AF 1119832

Surface Hardening of Machine Parts (Cont.)

TABLE OF CONTENTS

	<u>Page</u>
Preface	3
General Information	4
Surface Hardening by Peening	10
Shot peening	10
Ball peening by M.I. Kuzmin's method	23
Roller peening	25
Thermo-chemical Processes of Casehardening	34
Casehardening	34
Nitriding	42
Cyaniding	50

Card 3/4

SEMYACHKIN, S.Ye.; FILARETOV, G.V.; CHERNYAK, V.S., nauchnyy redaktor;  
KONTSEVAYA, E.M., redaktor; TORSHINA, Ye.A., tekhnicheskiy  
redaktor.

[Welded roofs] Svarnye krovli. Moskva, Vses.uchebno-pedagog.  
izd-vo Trudrezervisdat, 1956. 41 p. (MIRA 9:6)  
(Roofing--Welding)

NERODA, Vsevolod Andreyevich; FAYERSHTEYN, B.A., redaktor; KONTSEVAYA, E.M., redaktor; BOGHERT, A.P., tekhnicheskij redaktor.

[Modern machine-tool attachments] Sovremennye stanochnye prispособleniya. Moskva, Vses. uchebno-pedagog. izd-vo Trudreservizdat, 1956. 111 p.

(MIRA 9:6)

(Machine tools)

STEBLEV, Nikolay Mikhaylovich; SABININ, Andrey Aleksandrovich, nauchnyy redakter; KONTSEVAYA, E.M., redakter; EGGERT, A.P., tekhnicheskiiy redakter.

[Manual for young automobile enthusiasts] V pomoshch' iunomu avtosportsмену. Moskva, Vses. uchebno-pedagog.izd-vo Trudreservizdat, 1956. 161 p. (MIRA 9:6)  
(Automobiles)

ADN TSK 1977 E 2 111

PODGURSKIY, Gennadiy Vladimirovich; BEYZEL'MAN, R.D., nauchnyy redaktor;  
KONTSEVAYA, E.M., redaktor; ANTONYUK, P.D., tekhnicheskiiy redaktor

[Improvements in the technology of manufacturing cutting tools]  
Usovershenstvovaniia v tekhnologii proizvodstva rezhushchikh  
instrumentov. Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat,  
1956. 89 p. (MLA 10:5)  
(Cutting tools)

USTINOV, Nikolay Petrovich, kand.tekhn.nauk, dotsent; DROBINSKIY,  
Valentin Anisimovich, inzh.; KOVNER, G.M., kand.tekhn.nauk,  
nauchnyy red.; KONTSEVAYA, E.M., red.; GAVRILOV, F.P., red.;  
OSTRIROV, N.S., tekhn.red.

[Modern locomotives] Sovremennye lokomotivy. Moskva, Vses.  
uchebno-pedagog.izd-vo Trudrezervizdat, 1957. 126 p.  
(MIRA 12:11)

(Locomotives)

MOSKATOV, Yevgeniy Petrovich; AKSEL'ROD, Polina Savel'yeva, inzh., nauchnyy  
red.; KONTSEVAYA, N.M., red.; OSTRIROV, N.S., tekhn.red.

[Do it yourself; collection of articles] Svoimi rukami; sbornik.  
Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1957. 192 p.  
(Technology) (MIRA 11:3)

GLAZ, Abram Il'ich; GETLING, B.V., kand. tekhn. nauk, red.; KHEYFETS, I.G., nauchnyy red.; KONTSEVAYA, E.M., red.; PERSON, M.N., tekhn. red.

[Manual for beginning electricians] Spravochnik molodogo elektrotekhnika. Pod red. B.V.Getlina. 3. izd., ispr. Moskva, Prof-tekhizdat, 1961. 463 p. (MIRA 15:4)  
(Electric engineering--Handbooks, manuals, etc.)

PODVOYSKIY, L., inzh.; KONTSEVAYA, Ye., inzh.

Engineers' notes. Sov. profsoiuzy 6 no. 9:26-27 Ag '58. (MIRA 11:8)

1. Zavod "Serp i molot."

(Metallurgical plants)

(Labor and laboring classes--Education)

BROMBERG, Boris Moiseyevich; KOLBASNIKOV, N.A., nauchnyy red.; KONTSEVAYA,  
E.M., red.; GOROKHOV, Yu.N., tekhn.red.

[Modern radial drilling machines] Sovremennye radial'no-sverlil'nye  
stanki. Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1958.  
97 p. (MIRA 12:1)

(Drilling and boring machinery)

KONTSEVAYA, E.M.

SOKOLOV, Fedor Aleksandrovich, kand.tekhn. nauk,; USOV, Pavel Vasil'yevich,  
kand. tekhn. nauk,; DOBROGURSKIY, S.O., doktor tekhn. nauk, prof.,  
nauchnyy red.; KONTSEVAYA, E.M.,red.; RAKOV, S.I.,tekhn. red.

[Engineering mechanics] Tekhnicheskaya mekhanika. Moskva, Vses.  
uchebno-pedagog. izd-vo Trudrezervizdat, 1958. 422 p. (MIRA 11:12)  
(Mechanics, Applied)

KONTSEVAYA, E.M.

LEVINSON, Lev Yefimovich, prof. [deceased]; KOBINSKIY, A.Ye., doktor  
tekhn.nauk, nauchnyy red.; GAVRILOV, F.P., red.; KONTSEVAYA, E.M.,  
red.; OSTRIROV, N.S., tekhn.red.

[Theoretical mechanics with elements of the theory of mechanisms]  
Teoreticheskaya mekhanika s elementami teorii mekhanizmov. Izd.  
3-e, ispr. Pod red. A.E.Kobinskogo. Moskva, Vses. uchebno-pedagog.  
izd-vo Trudreservizdat, 1958. 410 p. (MIRA 11:5)  
(Mechanics)

UZHIIK, Georgiy Viktorovich, prof., doktor tekhn. nauk; SHUVAL, G.M., inzh.,  
nauchnyy red.; KONTSEVAYA, E.M., red.; GOROKHOV, Yu.N., tekhn.  
red.

[Strength of metals in machinery manufacture] Prochnost' metallov v  
mashinostroyeni. Moskva, Vses. uchebno-pedagog. izd-vo Trudreserv-  
izdat, 1958. 73 p. (MIRA 11:8)

(Metals)

KONTSEVAYA, E.M.

SHTAYERMAN, Il'ya Yakovlevich; GAL'PERIN, Abram Isayevich; KONTSEVAYA, E.M.,  
red., RAKOV, S.I., tekhn. red.

[Collection of problems on principles of mechanical engineering]  
Sbornik zadach po osnovam tekhnicheskoi mekhaniki. Moskva, Vses.  
uchebno-pedagog. izd-vo Trudrezervizdat, 1958. 201 p. (MIRA 11:7)  
(Mechanical engineering—Problems, exercises, etc.)

MOSKAL'EV, Leonid Aleksandrovich; VASIL'YEVA, I.A., kand.tekhn.nauk,  
nauchnyy red.; KONTSEVAYA, E.M., red.; PERSON, M.N., tekhn.red.

[Electrical engineering workbook] Zadachnik po elektrotekhnike.  
Izd.3., ispr.1 dop. Moskva, Vses.uchebno-pedagog.izd-vo Trud-  
rezervizdat, 1959. 180 p. (MIRA 12:10)  
(Electric engineering)

KLEMENT'YEVA, A.I.; SKOROKHODOV, M.A.; Prinimali uchastiye: ALEKSANDROV, G.P.;  
BABUN, F.Ya.; BAYBARIN, P.P.; VAYNSHTEYN, TS.Z.; GUSEV, L.V.; ZHETVIN,  
N.P.; KONTSEVAYA, Ye.M.; LEVINA, M.M.; NOVLYANSKIAYA, K.A.; POD-  
VOYSKIY, L.N.; TRUNTSEV, D.S.; FLEROV, N.G.; CHIKHACHEV, I.A.; YUROV,  
Yu.M.; GUDKOVA, N., red.; YEGOROVA, I., tekhn.red.

[Light over the gate] Svet nad zastavoi. Moskovskii rabochii,  
1959. 422 p. (MIRA 12:4)  
(Moscow--Metallurgical plants)

GLAZ, Abram Il'ich; GETLING, B.V., kand.tekhn.nauk, red.; KHEYFETS,  
I.G., nauchnyy red.; KONTSEVAYA, E.M., red.; PERSON, M.N.,  
tekhn.red.

[Handbook for the young electrical engineer] Spravochnik  
molodogo elektrotekhnika. Izd.2., ispr. 1 dop. Pod red. B.V.  
Getlinga. Moskva, Vses.uchebno-pedagog.izd-vo Proftekhnizdat,  
1960. 463 p. (MIRA 13:5)  
(Electric engineering--Tables, calculations, etc.)

KONTSEVAYA, Ye., inzh.; PODVOYSKIY, L., inzh.

Realization of a dream. NTO 2 no.4:20-21 Ap '60.  
(MIRA 13:6)

1. Zavod "Serp i molot," Moskva.  
(Moscow—Steel industry—Technological innovations)

S/028/60/000/010/013/020  
B013/B063

AUTHORS: Kontsevaya, Ye. M., Adabashev, T. I.

TITLE: Tensile Strength of Thin Sheet of Carbon Steel

PERIODICAL: <sup>26</sup>Standartizatsiya, 1960, No. 10, pp. 46-47

TEXT: This "Letter to the Editor" is a contribution to the standard for thin structural sheet of high-grade carbon steel, which was enforced in 1956. It is noted that ГОСТ 914-47 (GOST 914-47) meets the requirements of consumers much better than GOST 914-56 which it replaced. A disadvantage of the new standard is that it gives no simple and reliable methods for the determination of the punching properties. The sheet rolled in continuous mills is cooled too quickly in the air because of the high temperatures at the end of rolling, and thus takes the structure of normalized metal without additional heat treatment. It should be considered that normalized metal differs from annealed metal by its higher strength. As a result, the major part of metal normalized with a normal elongation and indentation depth according to Eriksen does not attain the strength specified in the standard. A reduction in tensile strength by double heat

Card 1/2

LERNER, L.S.; TERESHCHENKOV, A.A.; KOCHERYSHKIN, I.K.; NEVSKIY, Ye.V.,  
nauchnyy red.; KONTSEVAYA, E.M., red.; PEREDERIY, S.P., tekhn.  
red.

[Organization and methodology of work in electrical engineering  
laboratories] Organizatsiia i metodika laboratornykh rabot po  
elektrotekhnike. Moskva, Vses. uchebno-pedagog. izd-vo Prof-  
tekhnizdat, 1961. 109 p. (MIRA 14:8)  
(Electric engineering--Laboratory manuals)

VINOGRADOV, Nikolay Vladimirovich; KONTSEVAYA, E.M., red.; TOKER, A.M.,  
tekh. red.

[Electric machinery armature winder] Obmotchik elektricheskikh  
mashin. Izd.4., perer. i dop. Moskva, Vses.uchebno-pedagog. izd-  
vo Proftekhizdat, 1961. 349 p. (MIRA 14:8)  
(Electric machinery--Windings)

S/129/62/000/004/003/010  
E073/E535

10.1235  
AUTHORS: Boyarinova, A.P., Mel'kumov, I.N., Brusilovskiy, B.S.  
and Kontsevaya, Ye.M., Engineers

TITLE: Causes of brittle fracture of the nickel-chromium-  
aluminium alloy ЭИ652 (EI652)

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,  
no.4, 1962, 14-17 + 1 plate

TEXT: In the production of cold rolled 3 mm sheet from the alloy  
EI652 large cracks were frequently observed after intermediate hot  
rolling to 4.1 mm. In this paper the results are given of special  
investigations made for determining the causes of formation of such  
cracks and the method of eliminating them. In the investigations  
three experimental nickel-base heats of the following compositions  
were used:

No.	Cr	Al	Si	Mn	S	Table 1	
						P	Fe
1	26.80	3.00	0.25	0.06	0.007	0.006	0.46
2	28.08	3.35	0.23	0.07	0.009	0.006	0.44
3	27.00	3.14	0.22	0.07	0.007	0.005	0.60

Card 1/2

Causes of brittle fracture ...

S/129/62/000/004/003/010  
E073/E535

All the three heats contained 0.05% C and 1.03% "Ze". It was found that the cause of brittle failure of the alloy in the hot rolled state is the slow cooling in the temperature range 700 to 600°C, during which the solid solution decomposes and an inter-metallide phase of the type  $Ni_3Al$  forms. The quantity of the rejected phase depends on the time during which the alloy is within the dangerous temperature range. Combined with the stresses caused by work-hardening and also the thermal stresses, the rejection of the intermetallide phase leads to the formation of cracks. To prevent cracking, the breakdowns should be cooled separately (to 200°C) before stacking. There are 3 figures and 3 tables.

[Abstracter's note: 1.03% Ze is obviously a printing error.]

ASSOCIATIONS: Zavody "Elektrostal'" ("Elektrostal'" Works)  
and "Serp i Molot"

Card 2/2

BOYARINOVA, A.P., inzh.; MEL'KUMOV, I.N., inzh.; BRUSILOVSKIY, B.S., inzh.;  
KONTSEVAYA, Ye.M., inzh.; Prinimali uchastiye: ROMASHOV, V.M.;  
FOROMAREVA, G.S.

Causes of brittle failure of the EI652 nickel-chromium-aluminum  
alloy. Metalloved.i term.obr.met. no.4:14-17 Ap '62.  
(MIRA 15:4)

1. Zavody "Elektrostal'" i "Serp i molot".  
(Nickel-chromium-aluminum alloys--Brittleness)

43268

S/848/62/000/040/002/005  
E191/E481

11300

AUTHORS: Krupin, A.V., Astakhov, I.G., Candidates of  
Technical Sciences; Artem'yev, A.V., Masterov, V.A.,  
Kontsevaya, Ye.N., Engineers

TITLE: Warm rolling of ЭИ100 (EI100) stainless steel

SOURCE: Moscow. Institut stali i splavov. Sbornik. no.40, 1962.  
Protsesty prokatki. 138-151

TEXT: Rolling at a temperature intermediate between room and hot rolling temperatures (warm rolling) was examined with special reference to the effects of the number of passes, reduction factor and initial strip thickness as applied to ЭИ100 (X13H4Г9) [EI100 (Kh13N4G9)] steel, which belongs to the austenitic-martensitic class. For comparison, the cold rolling behaviour of the same steel was also examined. To determine the optimum temperature range, specimens were also tested in a tensile machine at temperatures between 20 and 400°C. A four-high laboratory mill with working rolls of 180 and back-up rolls of 360 mm diameter and a working length of roll of 800 mm was used operating at a surface speed of 0.5 m/sec. Sheets of 2 x 45 x 250 mm were furnace heated slightly above the test temperature, measured by a Card 1/2

Warm rolling ...

S/848/62/000/040/002/005  
E191/E481

thermocouple feeder. The rolling pressure was measured with universal load cells and automatically recorded. The temperature range for minimum rolling pressure coincides with that of the minimum tensile strength and extends from 130 to 310°C. The lower limit is preferable under shop conditions. Rolling from various thicknesses in a single pass and split into 10% passes has shown that warm rolling in several passes can increase the reduction by 15% compared with the maximum in cold rolling without intermediate anneal. The specific rolling pressure diminishes with increasing initial sheet thickness. Examinations of the metallographic structure, the hardness and the magnetic saturation flux density have shown that much less martensite forms in warm rolling and the cold work effect is substantially reduced. There are 12 figures.

Card 2/2

FEDOSOV, N. M., prof.; ASTAKHOV, I. I., kand. tekhn. nauk; KRUPIN, A. V.,  
kand. tekhn. nauk; ARKHANGEL'SKAYA, K. Yu., inzh.; ARKHANGEL'SKIY,  
A. V., inzh.; YELIN, I. I., inzh.; KONTSEVAYA, Ye. M., inzh.

Investigating specific pressure during the cold rolling of  
high-alloy steel. Sber. Inst. stal i splav. no.40:107-129  
'62. (MIRA 16:1)

(Rolling(Metalwork))  
(Pressure—Measurement)

GLAZ, Abram Il'ich; KONTSEVAYA, E.M., red.; CHISLOV, M.M., red.;  
PERSON, M.N., tekhn. red.

[Manual for beginning electricians] Spravochnik molodogo  
elektrotekhnika. 5 dop. izd. Moskva, Proftekhizdat, 1963.  
392 p. (MIRA 16:10)  
(Electric engineering--Handbooks, manuals, etc.)

ZHETVIN, N.P., kand.tekhn.nauk; GORBATENKO, I.V., inzh.; KONTSEVAYA, Ye.M., inzh.

Effect of chemical composition on the properties of peened  
Kh18N9 steel. Metalloved. i term. obr. met. no.1:45-41 Ja '63.  
(MIRA 16:2)

1. Zavod "Serp i molot".  
(Steel alloys—Testing)

L 11072-63

ENP(q)/EWT(m)/BDS--AFFTC/ASD--JD

ACCESSION NR: AF3001377

S/OL48/63/000/005/0129/0135

(2)  
60  
59

AUTHOR: Astakhov, I. G.; Krupin, A. V.; Pedozov, N. M.; Shilkov, V. B.; Pustovalov, U. V.; Kontsevaya, Ye. M.

TITLE: Specific pressure during cold rolling of alloy El602 and steel El962

SOURCE: IVUZ. Chernaya metallurgiya, no. 5, 1963, 129-135

TOPIC TAGS: cold rolling, austenite (El602), martensite (El962), deformation, gage of flat product, lubrication characteristics, hardening temperature, cogging, yield strength, relative elongation

ABSTRACT: The change in specific pressure of austenite (El602) and martensite (El962) steel during cold rolling are examined as a function of deformation, gage of flat product, and lubrication characteristics. The influence of hardening temperature on cogging characteristics are studied at various specific pressures, and as a function of yield strength and relative elongation. Traditional rolling production practice and theory was confirmed quantitatively in measurements of change of specific pressure during cold rolling in relation to gage of flat product. Orig. art. has: 2 tables, 7 figures, and 4 references.

Assn: Moscow Inst. of Steel and Alloys

Card 1/2/

KRUPIN, A. V., kand. tekhn. nauk; ASTAKHOV, I. G., kand. tekhn. nauk;  
ARTEM<sup>Y</sup>EV, A. V., inzh.; MASTEROV, V. A., inzh.;  
KONTSEVAYA, Ye. M., inzh.

Warm rolling of EI100 stainless steel. Sbor. Inst. stali i  
splav. no.40:138-151 '62. (MIRA 16:1)

(Rolling(Metalwork))  
(Steel, Stainless)

ACC NR: AT6034458

(A)

SOURCE CODE: UR/0000/66/000/000/0213/0218

AUTHOR: Zhetvin, N. P.; Frid, Ya. L.; Kontsevaya, Ye. M.; Sokol, I. Ya.; Lyukovich, V. L.

ORG: none

TITLE: Study of the kinetics of hardening and softening of heat resistant alloys with the aim of choosing the temperature interval for hot plastic deformation and heat treatment

SOURCE: AN SSSR. Institut metallurgii. Svoystva i primeneniye zharoprochnykh splavov (Properties and application of heat resistant alloys). Moscow, Izd-vo Nauka, 1966, 213-218

TOPIC TAGS: heat resistant alloy, metal deformation, metal heat treatment

ABSTRACT: The experiments were carried out on hot rolled samples of alloy Brand EI828 with a thickness of 2-3 mm, and cold rolled samples of alloy Brand EP460 with a thickness of 1.0-1.5 mm. The chemical composition of the alloys is shown in the following table:

Card 1/2

ACC NR: AT6034458

Alloy	C	Mn	Si	S	P	Ni	Cr
EI828. . . . .	0,03	traces	0,11	0,006	0,005	base	9,55
EP460. . . . .	0,03	traces	0,07	0,010	0,008	base	8,85

  

Alloy	Mo	W	Ti	B	Al	Ce	Nb
EI828. . . . .	8,81	5,01	0,06	0,008	4,50	0,15	-
EP460. . . . .	2,24	-	3,0	-	1,8	-	1,87

The samples were subjected to hardening in a laboratory electric furnace at a temperature of 950-1200°C, and aging at temperatures of 650-1000° with a holding time up to 12 hours. The mechanical properties ( $\sigma_b$ ,  $\delta_5$ , HB,  $a_k$ ) and the microstructure were determined before and after aging. A phase analysis was made of the precipitates which separated out from the hardened and aged samples of alloy EI828, and a dilatometric examination of the samples was made on a differential optical dilatometer. On the basis of the experimental data, a study was made of the kinetics and the temperature interval for the formation of the intermetallic phase of the type  $Ni_3Al$  or  $Ni_3(Ti, Al)$ . The following conclusions were drawn: 1) the decomposition of the solid solutions at aging temperatures starts the minute the aging process starts; 2) a maximum degree of hardening is achieved (at 800°) in an alloy containing 27% of the intermetallic phase; 3) weakening of the aged alloy Brand EP460 is reached on heating to 1050° and above, while for alloy EI828, this temperature is shifted to 1200°.

"The x ray analysis was done by S. S. Potapova, and the analysis of the intermetallic precipitate by A. P. Pogodina." Orig. art. has: 5 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: 10Jun66/ ORIG REF: 004/ OTH REF: 001

KONTSEVAYA, Ye.N.

The ONU "Kometa" mounted universal duster. Biul.tekh.-ekon.inform.-  
Gos.nauch.-issl.inst.nauch. i tekh.inform. no.4:76-78 '62.

(MIRA 15:7)

(Spraying and dusting equipment)

KONTSEVAYA, Ye.T., kolorist-khudozhnik

Improving the coloration of fabrics. Tekst.prom.22 no.3:73-74 Mr '62.  
(MIRA 15:3)

1. Moskovskaya otdelechnaya fabrika imeni Sverdlova.  
(Color in textile industries)

KONTSEVENKO, V.B., inzh. (g. Minsk)

Diesel trains and railroad motorcars on suburban commuters' lines. Zhel.-dor.transp. 43 no.9:37-38 S '61.

(MIRA 14:8)

(Railroad motorcars)

(Railroads-~~Commuting~~ traffic)

S/187/65/000/004/001/002  
A004/A127

AUTHORS: Semyankin, F.V., Kontsevich, A.I., Khokhlov, A.D.

TITLE: Measuring the set noise of microphones

PERIODICAL: "Tekhnika kino i televideniya", no.4, 1963, 35 - 38

TEXT: The authors give a description and a block-diagram of a device by means of which it is possible to carry out direct measurements of the signal-to-noise ratio of microphones taking into account the properties of hearing. The device has been developed by the Leningradskiy institut kino-inzhenerov (Leningrad Institute of Motion Picture Engineers) and uses the frequency characteristics of hearing, the practically obtained curves and its own frequency characteristics for noise measurements. Comparative measuring data of the signal-to-noise ratio of different types of microphones are presented. There are 3 figures and 1 table.

ASSOCIATION: Leningradskiy institut kinoinzhenerov (Leningrad Institute of Motion Picture Engineers)

Card 1/1

Kontsevich, A Ye

N/5  
662.323  
.KB

Povorotnyye ustroystva dlya parovozov /Revolving installations for locomotives/

Moskva, Transzheldorizdat, 1951 -

V. Diagr., Tables.

GRISHCHENKO, O.A., dots., otv. red.; GAMBURG, A.M., red.;  
DIDKOVSKAYA, S.P., red.; LISICHENKO, V.K., red.;  
SAPOZHNIKOV, Yu.S., red.; KONTSEVICH, I.A., red.;  
NARINSKAYA, A.L., tekhn. red.

[Studies of the forensic medical experts of the Ukraine]  
Trudy sudebnomeditsinskikh ekspertov Ukrainy. Kiev, Gos-  
medizdat USSR, 1962. 293 p. (MIRA 16:7)

1. Glavnyy sudebnomeditsinskiy ekspert Ministerstva zdavo-  
okhraneniya Ukr.SSR (for Grishchenko).  
(UKRAINE—MEDICAL JURISPRUDENCE)

KONTSEVICH, I.A.; KABAK, K.S.

Reactive changes in the vagus nerves in strangulation. Sud.-  
med. ekspert. 6 no.4:10-16 O-D'63 (MIRA 16:12)

1. Kafedra sudebnoy meditsiny (zav. - prof. Yu.S.Sapozhnikov)  
i kafedra gistologii i embriologii (zav.-prof. N.I.Zazybin)  
Kiyevskogo meditsinskogo instituta.

KONTSEVICH, Leonid Yevstrat'yevich; BOL'SHAKOVA, L.M., inzhener, redaktor;  
YUDZON, D.M., tekhnicheskii redaktor.

[Turntable structures for locomotives; building, operating, and  
repairing] Povorotnye ustroistva dlia lokomotivov; ustroistvo,  
ekspluatatsiia i remont. Izd. 2-oe, perer. Moskva, Gos.transportnoe  
zhelez-dor. izd-vo, 1955. 163 p. (MLRA 8:11)  
(Railroads--Turn-tables)

5 (2), 5 (3)

AUTHORS:

Batsanov, S. S., Kontsevich, M. S.

SOV/79-29-6-47/72

TITLE:

Reaction of Mercury Carbonate and Acetate With Halogens.I.  
(Vzaimodeystviye karbonata i atsetata rtuti s galogenami.I.)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 6,  
pp 1985-1991 (USSR)

ABSTRACT:

Mercury is one of the few metals in the chemistry of which the organic and the inorganic compounds are represented to the same degree. This special property of mercury is mainly due to the covalent nature of its compounds which brings about a certain independence of its valencies. This property becomes manifest in the inorganic chemistry of mercury by the possibility of a direct affiliation of the oxidizing agent to the salts of the monovalent mercury; the previously present anions are not affected; in the twenties, Indian scientists obtained the mixed salts  $Hg_2Y_nX_m$  by the direct action of the halogens. In this case X represents a halogen and Y a halogen of different type or a nitric and sulfuric acid residue (Refs 1, 2). The present paper investigates the reaction products of acetate and carbonate of the univalent mercury

Card 1/2

Reaction of Mercury Carbonate and Acetate With  
Halogens.I.

SOV/79-29-6-47/72

with halogens. The investigations in this field are promising since by a variation of the oxidizing agents a whole series of compounds may be obtained from one and the same initial product. By this means the chemistry of mercury is considerably extended and the synthesis of compounds with desired certain properties is made possible. Halogenation reactions of mercury carbonate and -acetate were carried out and the following perhalides were obtained:  $\text{Hg}_2\text{CO}_3\text{Cl}_4$ ,

$\text{Hg}_2\text{CO}_3\text{Br}_5$ ,  $\text{Hg}_2\text{CO}_3\text{J}_4$ ,  $\text{Hg}_2(\text{CH}_3\text{COO})_2\text{Cl}_4$ ,  $\text{Hg}_2(\text{CH}_3\text{COO})_2\text{Br}_5$ ,  $\text{Hg}_2(\text{CH}_3\text{COO})_2\text{J}_4$ . The physicochemical properties of the compounds obtained were investigated. The X-ray picture of carbonate of the univalent mercury was given for the first time and the densities of the mercury carbonate and acetate were determined. There are 4 tables and 8 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: April 15, 1958  
Card 2/2

AUTHOR: Kontsevich, N. Senior Inspector-Pilot (Zaporozhskaya oblast' DOSAAF Committee) (Zaporozh'ye) 85-58-7-26/45

TITLE: First Parachute Jumps (Pervyye pryzhki s parashyutom)

PERIODICAL: Kryl'ya rodiny, 1958, Nr 7, p 17 (USSR)

ABSTRACT: The author relates that students of the Melitopol'skiy institut mekhanizatsii sel'skogo khozyaystva (Melitipol' Institute for the Mechanization of Agriculture) will participate in the Spartacus Games. The students were given an opportunity to train in parachute jumping from two planes sent for this purpose to Melitopol' by the Zaporozhskiy aeroklub (Zaporozh'ye Aeroclub).

ASSOCIATION: Zaporozhskaya oblast' DOSAAF Committee

Card 1/1

1. Parachute jumping--USSR

KONTSEVICH, R.S., inzh; SOBOLEV, N.I., inzh.

Cupola furnace cooled by evaporating water for smelting ore.

Stroi. i dor. mash. 6 no.5:28-31 My '61.

(MIRA 14:6)

(Cupola furnaces)

KONTSEVICH, R.S., inzh.; SOBOLEV, N.I., inzh.

Cupola furnaces for producing mineral wool and their operation  
characteristics. Stroi. i dor. mashinostr. 3 no.1:30-34 Ja '58.  
(Cupola furnaces) (Mineral wool) (MIRA 11:1)

ca KONTSEVICH, V. I.

14

The water chemistry of hot springs of northern Transbaikalia. A. G. FRANK-KAMENETSKII AND V. I. KONTSEVICH. *Compt. rend. acad. sci. U. S. S. R.* 1031A, 10-20. —The chief constituents of the springs are  $\text{Na}_2\text{SO}_4$  and  $\text{Na}_2\text{SiO}_3$ . The analysis is given. RBA MAISEL

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

REGIONAL LITERATURE

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

REGIONAL LITERATURE

*Kontsevich, V.I.*

137-1958-2-2583

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 54 (USSR)

AUTHOR: Kontsevich, V.I.

TITLE: Obtaining Aluminum Oxide From Indigenous Clays by a Sulfate-Alkali Method (Polucheniye okisi alyuminiya iz mestnykh glin sul'fatno-shchelochnym metodom)

PERIODICAL: Tr. Irkutskogo gorno-metallurg. in-ta, 1955, Nr 7, pp 40-48

ABSTRACT: The purpose of the study was: 1) to determine the optimum conditions for extracting Al from indigenous clays when they were baked with alkali-metal sulfates; 2) to perform a full cycle of extracting pure  $Al_2O_3$  with baking done with  $(NH_4)_2SO_4$ . Clay was baked with: 1)  $(NH_4)_2SO_4$  and  $NH_4HSO_4$ ; 2)  $Na_2SO_4$  and  $H_2SO_4$ ; 3) the mixture  $(NH_4)_2SO_4$  and  $Na_2SO_4$ . When a triple quantity of  $(NH_4)_2SO_4$  or  $NaHSO_4$  was used to extract  $Al_2O_3$  from indigenous clays, extraction could attain 100 percent. A double quantity of mixture of equal portions of  $(NH_4)_2SO_4$  and  $Na_2SO_4$  yielded an  $Al_2O_3$  extraction of 96.8 percent. Baking with  $H_2SO_4$  yielded an  $Al_2O_3$  yield of 80.98 percent. To obtain pure

Card 1/2

137-1958-2-2583

Obtaining Aluminum Oxide From Indigenous Clays (cont.)

$\text{Al}_2\text{O}_3$  from clays, the clay had to be baked for an hour with  $(\text{NH}_4)_2\text{SO}_4$  at a temperature of  $350-450^\circ$ . The resulting cake was leached with water, and  $\text{NH}_4\text{OH}$  was used to precipitate the  $\text{Al}(\text{OH})_3$  from the solution; the  $\text{Al}(\text{OH})_3$  was then dissolved in  $\text{NaOH}$ , and the resulting aluminate was carbonized and calcined. The  $\text{NH}_3$  which separated out during the baking was collected, and the resulting solution of  $\text{NH}_4\text{OH}$  was returned to the task of precipitating  $\text{Al}(\text{OH})_3$ . The  $(\text{NH}_4)_2\text{SO}_4$  liberated in the process was concentrated by evaporation, crystallized, and again put through the cycle.

N. P.

1. Clays ~~Aluminum oxide~~ Extraction alkali methods 2. Extractions ~~Sulfate~~

Card 2/2

KONTSEVOY, B.M. (Leningradk, Yakovlevskiy pereulok, dom 6, kvartira 17)

Change in hyaluronidase activity in the blood serum following  
operative surgery. Vest. khir. 91 no.9:114-117 S'63.

(MIRA 17:4)

1. Iz 3-y khirurgicheskoy kliniki (zav. - prof. N.I. Blinov)  
Leningradskogo ordena Lenina instituta usovershenstvovaniya  
vrachey imeni S.M. Kirova.

KONTSEVOY, F.

Masonry

Introducing stone masonry in rural building by means of movable forms, Sel'. stroi. 7  
No. 2, 1952

Monthly List of Russian Accessions, Library of Congress, July 1952. UNCLASSIFIED.

FEL'DMAN, Aleksey Bernardovich; CHASTOYEDOV, Leonid Aleksandrovich;  
KONTSEVOY, G.M., inzh., retsenzent; NOVIKAS, M.N., inzh.,  
red.; KHITROVA, N.A., tekhn. red.

[Electric power supply for railroad telecommunication ap-  
paratus]Elektropitanie ustroistv sviazi na zheleznodorozhnom  
transporte. Moskva, Transzheldorizdat, 1962. 222 p.

(MIRA 15:10)

(Electric power supply to apparatus)  
(Railroads--Electric equipment)

KONTSEVOY, M.G.

USSR/Cultivated Plants - Potatoes. Vegetables. Melons. etc.

M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15644

Author : M.G. Kontsevoy

Inst :

Title : The Morphological and Biological Features of the  
Myachkovo Onion.  
(Morfo-biologicheskiye osobennosti Myachkovskogo luka).

Orig Pub : Dokl. Mosk. s.-kh. akad. in. K.A. Timiryazeva, 1956, 1,  
No 26, 285-292.

Abstract : Based on literary evidence and observations it is suggested that the Myachkovo onion appeared as the result of a cross between the southern Kaba type variety introduced about a hundred years ago in the Myachkovo village (in Kolomenskiy rayon, Moscow Oblast') and a local onion of the Rostov variety. In its high productivity, small amount of branching and comparatively low reaction to the shortened day, the Myachkovo onion may be grouped

Card 1/2

Kontsevoy, M. G.

Name: KONTSEVOY, M. G.

Dissertation: The morphobiological peculiarities and some problems of  
the selection and seed growing of the Myachkovskiy onion

Degree: Cand Agr Sci

*Referred at*  
~~Appellation~~ Publication: Moscow Order of Lenin Agricultural Acad imeni K. A.  
Timiryazev

*Publication*  
~~Defense~~ Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 47, 1956

KONTSEVOY, M.G., aspirant.

Biologic characteristics of Miachkovo onions and some problems  
in their breeding. *Izv.TSKhA* no.1:20-30 '57. (MLRA 10:7)  
(Onions--Varieties)

KONTSEVOY, M.G.

USSR/Cultivated Plants - Potatoes. Vegetables. Melons. etc.

M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15645

Author : M.G. Kontsevoy

Inst :

Title :

Several Problems in the Selection and Seed Cultivation of the Myachkovo Onion.  
(Nekotoryye voprosy selektsii i semenovodstva Myachkovskogo luka).

Orig Pub : Sad i ogorod, 1957, No 2, 23-24.

Abstract : It has been established by research of the Vegetable Testing Station of the Moscow "Order of Lenin" Agricultural Academy im. K.A. Timiryazev that the Myachkovo onion is the population of several hereditary forms. The most valuable form from the standpoint of the farm economy is that with thick bulbs having a yellowish pink color to its dry scales and little shooting in its seed bunches.

Card 1/2

USSR/Cultivated Plants - Potatoes. Vegetables. Melons. etc.

M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15645

The content of such a form rises up to 60-70%. The remaining 30-40% are characterized by signs of degeneration and are less valuable from the economic point of view. Variety improving selection is recommended to eliminate further variety deterioration.

Card 2/2

87

KONTSEVOY M.G.

USSR/Cultivated Plants. Potatoes. Vegetables. Melons.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20360.

Author : M.G. Kontsevoy

Inst : Not given

Title : The Variability of Several Characteristics of the Myachkovskiy  
Onion Depending on Environment and the Size of the Sowing.  
(Izmenchivost' nekotorykh priznakov myachkovskogo luka ot  
usloviy okruzhayushchey sredy i razmerov sevka).

Orig Pub: Dokl. Mosk. s.-kh. akad. im. K.A. Timryazeva, 1957, vyp.  
28, 367-372.

Abstract: At the Vegetable Testing Station of the Moscow "Order of  
Lenin" Agricultural Academy im. K. A. Timeryazev it has  
been established through tests run from 1954-1955 that  
the depth of planting and the plant density change the form  
of onion bulbs from flattened to round, reduce the quantity

Card : 1/2

USSR/Cultivated Plants. Potatoes. Vegetables. Melons.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20360.

of onion sprouts while drastically lowering their weight. An increase in the size of the sowing shortens the length of the vegetative period, increasing the size of the cluster and weight of the onion bulbs. A sowing having a diameter of about 2 centimeters yields no shooting plants, while a sowing in the magnitude of 2.75-3 cm yields about 8% shooting plants. It is recommended for food purposes that sowings with a diameter of 1.5 - 2.5 cm and a seeding rate of 80-110 kilograms per hectare be used.

Card : 2/2

KONTSEVOY, N.

In the Council for the Coordination of Scientific Research Work on  
Peat at the All-Union Scientific Research Institute of Peat of the  
Supreme Council of the National Economy. Torf.prom. 38 no.1:37-38  
'61. (MIRA 14:2)

(Peat industry)

KONTSEVOY, N.S., kandidat tekhnicheskikh nauk.

Results of the first year of using electric machines UPT-2 and SVT-2. Terr.  
prom. 30 no.6:12-14 Jo '53.  
(MLRA 6:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.  
(Peat industry)

KONTSEVOY, N.S., kandidat tekhnicheskikh nauk; PREOBRAZHENSKIY, V.A.,  
kandidat tekhnicheskikh nauk.

Results in the second year of using electric machines for winning  
cut peat. Torf.prom. 31 no.3:16-18 '54. (MLRA 7:6)

1. VNIITP. (Peat machinery)

KONTSEVOY, N. S.

✓ The effect of particle size of milled peat upon its drying under field conditions. N. S. Kontsevoi. *Torfyannaya Prom.* 32, No. 0, 16-18(1955).—The av. drying velocity of milled peat, at equal peat load upon a unit surface, is the greater, the larger the peat particles. An increase in the specific peat load upon a unit surface increases also the difference in the drying rate of the coarse and the fine particles. The effectiveness of drying milled peat is related to the size distribution, and is the better the lower the fine content in the peat. For best drying operations, the peat should be granulated. W. M. Sternberg

A-U Sci Res Inst Peat Industry

BRYANTSEV, A.V., inzhener; KONTSEVOY, N.S., kandidat tekhnicheskikh nauk.

Intermixing layers of peat on milled peat fields. Terf.pren.32  
no.8:4-5 '55. (MLRA 9:4)

1.Terfepredpriyatiye imeni Klassena (for Bryantsev).2.Vsesoyuznyy  
nauchno-issledovatel'skiy institut terfyaney promyshlennosti (for  
Kontsevoy). (Peat industry)

*Kontsevoy, N.S.*

KONTSEVOY, N.S., kandidat tekhnicheskikh nauk.

Determining the relative drying rate of milled peat under field conditions. Torf.prom. 34 no.5:7-8 '57. (MIRA 10:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat)

KONTSEVOY, H.S..starshiy nauchnyy sotrudnik

Testing the FVP machine for the winning of pelletized peat. Torf.  
prom. 35 no.2:30 '58. (MIRA 11:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy  
promyshlennosti.  
(Peat machinery--Testing)

KONTSEVOY, N.S., kand.tekhn.nauk; MALKOV, L.M., inzh.

Some results of the investigation of the winning of granular peat in 1958. Torf.prom. 36 no.4:9-10 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.

(Peat)

KONTSEVOY, N.S. , kand.tekhn.nauk

Twenty-five years of the All-Union Scientific Research Institute  
of the Peat Industry. Torf.prom. 37 no.6:30-32 '60.

(MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy  
promyshlennosti.

(Peat industry)

KONTSEVOY, N.S., kand.tekhn.nauk

Modern equipment of the peat industry in Sweden. Mekh. i avtom.proizv.  
15 no.12:53-55 D '61. (MIRA 14:12)  
(Sweden--Peat machinery)

KONTSEVOY, N.S., kand.tekhn.nauk

More powerful tractors and diesels for automotive vehicles  
should be made available to the peat industry. Torf. prom.  
38 no.5:10-13 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy  
promyshlennosti.

(Peat industry—Equipment and supplies)  
(Transportation, Automotive)

SOKOLOV, A.A.; PETRENKO, F.F.; KOVALEV, V.F.; YELISEYEV, M.A.;  
ROZENPLENTER, N.F.; YANCHUKOVICH, A.E.; CHUBAROV, N.D.; KONTSEVOY,  
N.S.; PREOBRAZHENSKIY, V.A.; BOCHAROV, M.S.; KASHCHEYEV, G.G.;  
SELENNOV, G.V.; SAFONOV, K.Ye.; FUNIKOV, S.A.; RASKIN, G.I.;  
RABKIN, B.M.

Vadim Konstantinovich Gutsunaev; obituary. Torf.prom. 39  
no.3:37 '62. (MIRA 15:4)  
(Gutsunaev, Vadim Konstantinovich, 1914-1942)

KONTSEVOY, N.S.

Scientific and Technical Conference on Peat. Torf. prom. 40  
no.4:35-36 '63. (MIRA 16:10)

(Peat industry--Research)

KOFTSEVOY, S.

Payment for state grain purchases. Fin.SSR 15 no.11:59-60  
N°54. (MLRA 8:2)  
(Agriculture—Economic aspects)(Grain trade)

KONTSEVOY, S.

Lower distribution costs in consumers' cooperatives. Fin. SSSR 16  
no.1:53-55 Ja '55. (MLRA 7:12)  
(Cooperative societies)

MAYZELIS, M.Ya. Prinimali uchastiye: ROMEL', T.E.; KONTSEVOY, V.A.

Penetration of radioactive phosphorus isotope into the cerebrospinal fluid in case of introduction through the mucosa of the nose in patients with schizophrenia and other mental diseases. Zhur.nevr. i psikh. 62 no.12:1863-1867 '62.

(MIRA 16:11)

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KONTSEVOY, V.A.

Transitory seizures in the periodic form of schizophrenia.  
Zhur. nevr. i psikh. 65 no.8:1232-1238 '65.

(MIRA 18:8)

1. Klinika shizofrenii (zaveduyushchiy R.A. Nadzharov) Instituta psikiatrii AMN SSSR, Moskva.

KONTSEVOY, Ye.M., inzh.

Torsion and bending of thin walled rods. Trudy VNIIF Mash. no. 10:  
38-79 '62. (MIRA 17:3)

*Kontsevoy, Yu. A.*

57-27-7-3/40

AUTHORS: Iglitsyn, M. I., Kontsevoy, Yu. A., Kudin, V. D., Meyer, A. A.

TITLE: Lifetime Measurements of Charge-Carriers in Semiconductors  
(Ob izmerenii vremeni zhizni nositeley zaryada v poluprovodnikakh)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1957, Vol. 27, Nr 7, pp. 1414 - 1424  
(USSR)

ABSTRACT: The measuring method is based on the modulation of conductivity in a point-contact. The attempt is made here in investigations of the concentration-variation of the not real (minor ?) charge-carriers to take into account not only the recombination in the volume, but also that on the surface, as well as the diffusion of the charge-carriers. On this basis the calculation-formulae are derived under the assumption that the non-equilibrated concentration of the charge-carriers in the sample is small as compared to the equilibrated one, and that the lifetime of the unreal charge-carrier is not dependent on their concentration. The dependence of the measurement results for the lifetime on the parameters of the injecting impulse is investigated and the conditions for a correct measurement are determined. On the basis of the analysis given here the absolute usability of this method for the determination of the

Card 1/2

BY ON TSEVOY, Yu. A.

AUTHORS: Iglitsyn, M. I., Kontsevoy, Yu. A., Kadin, V. D., 57-27-7-4/40

TITLE: Lifetime Measurements in Monocrystal-Silicon (Izmereniye vremeni zhizni v monokristallicheskom kremnii).

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1957, Vol. 27, Nr 7, pp. 1425-1430 (USSR)

ABSTRACT: The method is based on the measurement of the modulated conductivity in the domain of a point-contact during the passage of two consecutive current-impulses. The lifetime measurements are compared to the measurement results for the diffusion-length obtained by the photoelectric method (with movable light probe). It is shown that both data are in good agreement. The dependence of the lifetime of charge-carriers on temperature was examined. It is shown that in a wide temperature range of from 200 to 630°K for most of the silicon-samples with a p- and n-conductivity the variation-character of the lifetime of unreal charge-carriers in dependence on temperature is in agreement with the conclusions of the theory developed by W.Shockley and W.Read (Phys. Rev. 87, 835, 1952) and that it has a great similarity with the data obtained for germanium. It is shown that the ionization-energy of the recombination-centers lies in the range of from 0,13 to 0,18 eV. A completely different character of the dependence of lifetime on temperature was determined in the case of a silicon-sample with

Card 1/2

Lifetime Measurements in Monocrystal-Silicon.

57-27-7-4/40

electron-conductivity. An essential decrease in the measured lifetime was here observed in the domain of the admixture-conductivity at rise of temperature from 0° to 100°C. Upon further rise of temperature the dependence of lifetime on temperature took place like in the other samples. In the case of intensive illumination the dependence of the lifetime on temperature in the entire temperature range investigated took a normal course. There are 5 figures, 1 table, and 17 references, 2 of which are Soviet.

SUBMITTED: November 1, 1956

AVAILABLE: Library of Congress

1. Single crystals-Conductivity-Measurement
2. Single crystals-Electrical properties-Measurement

Card 2/2

KONTSEVOY

AUTHORS: Iglitsyn, M. I., Kontsevoy, Yu. A., Sidorov, A. I. 57-11-5/33

TITLE: Distribution of Non-equilibrium Current Carriers in the Basic Region of the p-n-Junction with a High Injection Coefficient (Raspredeleniye neravnovesnykh nositeley zaryada v bazovoy oblasti p-n-perekhoda s vysokim koeffitsiyentom in'yektsii).

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 11, pp. 2458-2460 (USSR).

ABSTRACT: The fundamental results of the solution of the equilibrium system for stationary conditions of a p-n-transition in semiconductors are given according to W. Shockley, i. e. for the electronic region of the p-n-transition with  $\gamma \approx 1$  in the case of an arbitrary injection level, with respect to the field outside the transition and the dependence of the lifetime on the injection level. A concrete case of a germanium with the specific resistance  $\rho = 2 - 3$  Ohm. cm is investigated. An equation is derived by means of which the analytic relation between the injection level in the vicinity of the p-n-transition and the density of the current can be determined by the junction in the forward direction (for the transition with  $\gamma \approx 1$ ). It is shown that in the vicinity of the p-n-transition the distribution of the non-equilibrium current carriers approaches an

Card 1/2

AUTHORS: Iglitsyn, M. I., Kontsevoy, Yu. A.,  
Sidorov, A. I.

57 - 11-6/33

TITLE: Lifetime of Non-equilibrium Current Carriers at Arbitrary Injection Levels (Vremya zhizni neravnovesnykh nositeley zaryada v germanii pri proizvol'nykhurovnyakh in'yektsii).

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 11, pp. 2461-2466 (USSR).

ABSTRACT: The dependence of the lifetime on the concentration of the non-equilibrium current carriers at different temperatures is investigated at germanium types alloyed with antimony. It is shown that the lifetime decreases with the increase of the injection level at room temperature in the case of highly resistive types, whereas it increases in the case of low resistance types. A comparison of the experimental results with the theory of W. Shockley and W. Read admits the determination of the level type (donor- or acceptor type), its position in the forbidden zone and the ionization energy, the ratio for the capture probability for holes and electrons, as well as data concerning the dependence of the capture cross sections on the temperature. It can be affirmed that in the case of all types investigated the recombination of the electrons and the holes takes place in the levels of

Card 1/2

67317

SOV/181-1-8-22/32

24.7700  
9(3), 24(3)

AUTHOR:

Kontsevoy, Yu. A.

TITLE:

On the Determination of the Capture Cross Section in Recombination at Charged Centers

PERIODICAL:

Fizika tverdogo tela, 1959, Vol 1, Nr 8, pp 1289 - 1293 (USSR)

ABSTRACT:

The present paper gives a report on a method for determining the four cross sections  $c_{n1}$ ,  $c_{p1}$ ,  $c_{n2}$ , and  $c_{p2}$  on the basis of measuring the dependence of lifetime on non-equilibrium carrier concentration.  $c_{nk}$  and  $c_{pk}$  denote the total electron- and hole capture cross sections for the k-th level. S. G. Kalashnikov in Moscow and G. Ya. Pikus in Leningrad found similar results as C. T. Sah and W. Shockley (Ref 2) by way of the phenomenological recombination theory. The expression

$$\tau = \tau_0 \frac{1 + ax + bx^2}{(1 + x)(1 + cx)}$$
 was found for lifetime as a function of non-equilibrium carrier concentration. x denotes the ratio of excess carrier concentration to equilibrium concentration. Formulas for the coefficients a, b, c are separately given. Further,  $\tau$  is specialized for low injection levels ( $x \rightarrow 0$ ).

Card 1/3

67317

On the Determination of the Capture Cross Section in SOV/181-1-8-22/32  
Recombination at Charged Centers

The lifetime for n-type and p-type samples is the same in the case of high injection levels ( $x \rightarrow \infty$ ). The dependence of lifetime on non-equilibrium carrier concentration is suitably described by means of the expression  $f(x) = (1 + ax + bx^2)/(1 + cx)$ . n- and p-type samples of sufficiently good conductivity may be used, and measurements be made at low temperatures. The four capture cross sections  $c_{n1}$ ,  $c_{n2}$ ,  $c_{p1}$ , and  $c_{p2}$  can be determined from the solution of a system of four linear equations obtained here. The experimental method employed to determine the above relations should render a very accurate lifetime determination possible when the non-equilibrium carrier concentration varies. This concentration must also be sufficiently low. For  $c_{n1} = c_{n2} = 0.1c_{p1} = 0.1c_{p2}$  the value  $x \ll 5 \cdot 10^{-3}$  is obtained. In the following, fairly long expressions for x of p-type samples are given. For  $c_{n1} = c_{n2} = 0.1c_{p1} = 0.1c_{p2}$  the value  $x \ll 0.5$  is obtained. In spite of the small x value ( $\sim 10^{-2}$  to  $10^{-3}$ ) lifetimes may considerably change at low temperatures with

Card 2/3

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On the Determination of the Capture Cross Section in SOV/181-1 -8-22/32  
Recombination at Charged Centers

increasing injection level. In the case of recombination at impurities forming two low levels in the forbidden zone the range of reliable values of the injection level has a lower limit which can be estimated. The author thanks G. Ye. Pikus for having derived a formula, and M. I. Iglitsyn and S. G. Kalashnikov for their discussion of the paper and valuable advice. There are 6 references, 3 of which are Soviet.

SUBMITTED: August 5, 1958

Card 3/3

IGLITSYN, M.I.; KONTSEVOY, Yu.A.

Determining the physical parameters of recombination centers  
created by copper in germanium. Fiz.tver.tela 2 no.6:1148-1151  
Je '60. (MIRA 13:8)  
(Copper) (Germanium crystals)

9.4310

77966  
SOV/109-3-3-20/26

AUTHORS: Iglitsyn, M. I., Kontsevoy, Yu. A., Temko, K. B.  
TITLE: Calculation of Transient Processes in an n-p Junction  
at Arbitrary Injection Levels  
PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 3, pp 508-  
513 (USSR)  
ABSTRACT: This work was submitted to the III All-Union Conference  
on Semiconductor Theory in L'vov, in April 1959. Refer-  
ence is made to previous investigations by different  
scientists of transient processes in the n-p junction.  
Figure 1 illustrates the operating conditions. As  
shown in Fig. 1, the voltage remains constant during  
time T until the concentration of the excess carriers  
drops to zero, then goes through zero and approaches  
the voltage of the source. The duration T of the  
transient process can be related to the lifetime of  
the charge carriers in the base zone. This paper is

Card 1/42

Calculation of Transient Processes in an n-p  
Junction at Arbitrary Injection Levels

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SOV/109-5-3-20/26

an attempt to study the transient process, taking into consideration the variation of lifetime at differing injection levels. A particular case  $I_{dir} = I_{rev} = I$  is analyzed. The solution of this problem shows how the duration  $T$  of the transient process depends on the injection level, i.e., the direct current, under the assumption of a constant ratio of direct to reverse current. The relation of the transient process duration and lifetime of minority carriers in the base zone will be investigated also. The duration of transient process,  $T$ , depends on injection level. 1. Formulation of the Problem. The calculation is made for a plane p-n junction with thick base and high electron mobility under the following assumptions: a. The concentration of recombination centers is low, and lifetime under steady conditions changes with injection level according to Shockley-Read.

Card 2/12

9,4300(1138, 1147, 1143)  
26.2421

S/181/61/003/005/019/042  
B136/P 201

AUTHORS: Kontsevov, Yu. A. and Iglitsyn, M. I.

TITLE: Study of the steady photoconductivity and of the surface recombination rate in silicon

PERIODICAL: Fizika tverdogo tela, v. 3, no. 5, 1961, 1465 - 1474

TEXT: Previous papers (Ref.1: H. B. De Vore, Phys, Rev. 102, 86, 1956) have dealt with cases of the surface recombination rate s being the same or differing on the two sides of the test plates (Ref.3: V. A. Petrusovich, FTT., I, 62, 1959). It had been found in Ref.6 (H. M. Bath, M. Cutler, Phys. Chem. Solids, 5, No 3, 171, 1958) that the steady photoconductivity (henceforth referred to as SPC) in silicon changed nonlinearly with the intensity of exposure. Evidence had been offered in Ref.8 (Harten, Phil. Res. Rep., 14, 346, 1959) of a decreasing under exposure, especially in case of a surface treatment leading to the formation of inversion layers. The authors of the present paper studied SPC with volume and surface excitation as a function of the strength of exposure or of the injection level of the non-equilibrium carriers. New methods of measuring s were ob-  
Card 1/6

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Study of the ...

S/181/61/003/005/019/042  
B136/B201

tained, furthermore, by an analysis of the theory of SPC. Proceeding from the equation for the change of voltage with the passage of current through an exposed rectangular semiconductor plate, dimensionless quantities and the mean concentration  $\bar{p}$  of the non-equilibrium carriers from the solution of the diffusion-recombination equation are introduced into the first-mentioned equation. A very unwieldy equation is then obtained, which is specialized for cases of pure volume and surface generation of pairs. The method of measuring the "constant photoresponse" is then derived. The basic construction of the experimental arrangement is shown in Fig.1. The light was modulated with 75-125 cycles and allowed to pass through a 2.5%  $\text{CuCl}_2$  solution filter and a polished 6-mm silicon foil. An organic glass platelet was used for partial reflection into the Ge photodiode. The specimens were rotated about their longitudinal axis by  $180^\circ$ . In addition, it was possible to measure  $s$  at pressures of  $10^{-5}$  mm Hg and in various gas media.  $s$  was measured by placing the point probe on the side facing the illuminated one, and by repeating the measurement after turning about  $180^\circ$ . The values obtained for  $s$  with silicon (Table 2) fit those obtained by the method of extinction of photoconductivity. The remarkable differences in the results

Card 2/6

Study of the ...

S/181/61/003/005/019/042  
B136/B201

of the first two methods as compared to the latter (numerical) can be partly explained by the treatment of the specimens with HF and the measurement in humid  $N_2$  atmosphere or in vacuo. The dependence of the emf of the photoconductivity  $\bar{V}_{vol}$  and  $\bar{V}_{surf}$  on the intensity of modulated light was measured with special accuracy by means of bilateral illumination as well as by grinding and etching of the surface. In case of a low recombination rate and a treatment leading to a band curvature on the surface, one obtains entirely deviating curves for  $\bar{V}_{surf}=f(I)$  ( $I$ -current through semiconductor), which is related to the existence of slow states. A carrier exchange takes place between the layers near the surface and the slow states, due to which the surface potential rises, while  $s$  drops. A great number of measurements shows that a treatment with potassium bichromate leads to an electron exchange, which has a charging of the acceptor levels as a consequence. On a treatment with concentrated hydrofluoric acid in the presence of an atmosphere of humid nitrogen, holes are transferred from the valence band to donor levels. To determine the dependence of  $s$  on the intensity of injection precisely, function  $\bar{V}_{vol}=f(I)$  was examined.  $\bar{V}_{vol}$  grows more strongly than

Card 3/6

23111

Study of the ...

S/181/61/003/005/019/042  
B136/B201

$\bar{V}_{\text{surf}}$ , which fact contradicts the theory. There are 4 figures, 3 tables, and 12 references: 4 Soviet-bloc and 8 non-Soviet-bloc. The three most recent references to English-language publications read as follows: Harten, Phil. Res. Rep., 14, 346, 1959; T. M. Buck, F. S. McKim, J. Electrochem. Soc., 105, no. 12, 709, 1958; A. H. Benny, F. D. Morten, Proc. Phys. Soc., 72, no. 468, 1007, 1958.

SUBMITTED: August 29, 1960 (initially)  
December 15, 1960 (after revision)

Card 4/6

KONTSEVOY, Yu.A.; KUDIN, V.D.; GERASIMOV, A.D.; ASVADUROVA, Ye.I.;  
TATARENKOV, A.I.; KUDRYAVTSEVA, V.F.

Apparatus for measuring the electrophysical properties of semi-  
conducting materials. Zav.lab. 29 no.11:1397-1399 '63.  
(MIRA 16:12)

KOLESNIK, L.I.; KONTSEVOY, Yu.A.

Long-time changes in the photoelectromagnetic effect in germanium.  
Fiz. tver. tela 5 no.11:3346-3348 N '63. (MIRA 16:12)

KONTSEVOY, Yu. A.

"Processes of Recombination of Germanium and Silicon for the Wide Range of Injection Levels of Current Carriers."

Dissertation defended in the Institute of Radioengineering and Electronics for the academic degree of Candidate of Physicomathematical Sciences

Vestnik Akad Nauk, No. 4, 1964, pp. 119-145

ACCESSION NR: AP4011753

S/0181/64/006/001/0134/0172

AUTHORS: Kolesnik, L. I.; Kontsevoy, Yu. A.

TITLE: Nonlinear photoconductivity in germanium

SOURCE: Fizika tverdogo tela, v. 6, no. 1, 1964, 164-172

TOPIC TAGS: steady state, photoconductivity, plastic deformation, heat treatment, recombination, injection level, dislocation, photoconductivity lifetime, inherent absorption, minority carrier

ABSTRACT: The authors have investigated the steady-state photoconductivity of Ge subjected to plastic deformation and heat treatment. Measurements were made in the region of inherent absorption for the interval 150-3000 over a wide range of illumination. Capture of minority carriers was observed at lowered temperatures, accompanied by an increased lifetime of steady-state photoconductivity; under these circumstances samples of n-type Ge had an energy of  $0.46 \pm 0.02$  ev, while p-type Ge had an energy of  $0.30 \pm 0.02$  ev. With increase in illumination ( $I$ ), the lifetime of photoconductivity ( $\tau$ ) decreases according to the law  $\tau \sim I^{-1} \log(1 + AI)$ . Over a wide

Card 1/2

EWI(1)/EWI(m)/T/EWP(t)/EWP(b)/EWA(h) Pz-6/Feb IJP(c) JD/AT  
ACCESSION NR: AP5007015 S/0120/65/000/001/0005/0016

AUTHOR: Kontsevoy, Yu. A.

TITLE: Methods for investigating the electrophysical parameters of  
semiconductor epitaxial films (Review)

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1965, 5-16

TOPIC TAGS: epitaxial film, semiconductor

ABSTRACT: Based on 1956-63 predominantly Western sources, the review presents these features: Measurement of film thickness: the section-coloring method, the interference method, the tetrahedral-defect method. Probe methods for measuring film resistivity: 4-probe method, 5-probe method, opposing-probes method. Measurement of concentration, mobility, and lifetime of carriers. Investigation of the distribution of impurities over the thickness and over the area of a semiconductor: measuring the shf-diode impedance, measuring

Card 1/2